"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

GROMOV, Viktor Ivanovich; POTEMKIN, Levkim Petrovich; SHASKOL'SKIY, Igor' Pavlovich; SLOBOZHAN, I.I., red.; TIKHONOVA, I.M., tekhn. red.

[Priozersk; historical sketch: Korela-Kexholm-Priozersk] Priozersk; istoricheskii ocherk: Korela-Keksgol'm-Priozersk. Izd.2., ispr. i dop. Leningrad, Lenizdat, 1963. 144 p. (MIRA 16:6)
(Priozersk--History)

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L 14801-65 EWT(d)/EWT(l)/EEC(k)-2/EEC-4/EPR/EWA(m)-2/EWA(h) Po-4/
Pq-4/Pg-4/Ps-4/Peb/Pk-4/Pl-4 AFWL/AEDC(a)/ASD(f)-2 WW
ACCESSION NR: AR3004144 S/0272/63/000/006/0089/0089

SOURCE: RZh. Metrologiya i izmer. tekhn. Otd. vy*p., Abs. 6.32.702

AUTHOR: Potemkin, L.V.

TITLE: The use of a gyroscopic effect in measuring the flow of liquids

CITED SOURCE: Tr. N.-i in-ta teploenerg. priborostr, sb. 4, 1961, 23-37

TOPIC TAGS: mass flow meter, gyroscopic flow meter, flow meter operation, fluid flow

TRANSLATION: The theory and operating principles of gyroscopic mass flow meters are described and the author cites their advantages over other types of flow meters. It is shown analytically that the gyro moment is directly proportional to the mass flow weight rate and the velocity of the forced flow, and does not depend on a change in parameters of the measured medium. Functions given in the article facilitate the selection of the optimal geometric dimensions of the sensitive element and allow proper determination of the velocity of the forced flow, which are required to obtain adequate inversion forces on the sensitive element. Bibl. with 2 titles; 5 illustrations. M. Mekler

SUB CODE: ME, IE ENCL: 00

Card 1/1

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

L 18608-65
ACCESSION NR: AR3004145 S/0272/63/000/006/0089/0090

SOURCE: RZH. Metrologiya i izmer, tekhn. Otd. vy*p., Abs. 6.32.703

AUTHOR: Potemkin, L. V.

TITLE: A study of vibration techniques for measuring mass flow utilizing the hygroscopic effect

CITED SOURCE: Tr. N.-i in-ta teploenerg. priborostr., sb. 2, 1961, 78-94

TOPIC TAGS: mass flow meter, vibrational flow meter, precession amplitude, flow meter testing, hygroscopic effect

TRANSLATION: The author analyzes the operation of a mass flow meter utilizing the hygroscopic effect produced by vibration in a hygroscopic system as its operating principle. He evolves an equation which demonstrates that precession amplitude is directly proportional to mass flow. A description is given of experimental verifications of a prototype vibrational mass flow meter,

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ACCESSION NR: AR3004145

0

carried out on a standard flow meter installation. These tests indicate the existence of a rectilinear relationship between precession amplitude and the mass flow, the independence of instrument indications of changes in parameters of the measured medium, as well as negligible pressure losses and high sensitivity in the low measurement range. It is indicated that the absence of direct contact with the measured medium comprises one of the advantages of the discussed flow meter design. Bilb. with 3 titles, 6 illustrations. M. Mekler

SUB CODE: ME ENCL: 00

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

L 38261-65 EWT(1)/EPR/T-2 Ps-4 WW S/0286/65/000/005/0078/0078

ACCESSION NR: AP5008214

AUTHORS: Makarevich, O. P.; Yanbukhtin, I. R.; Potemkin, L. V.

TITLE: Turbine flowmeter. Class 42, No. 168905

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 78

TOPIC TAGS: flowmeter

ABSTRACT: This Author Certificate presents a turbine flowmeter containing a retarded impeller, a rotation angle detector, and a device creating the retarding moment. To increase the reliability, to guarantee complete hermeticity of the detector case, and to isolate the electric portion of the flowmeter from the controlled medium, the rotation angle detector and the device creating the retarding moment are electromagnetic systems achieving induction coupling with the impeller contained in a baffle (see Fig. 1 on the Enclosure). To increase reliability and to insure the possibility of operation under conditions of vibration, shock, and elevated temperatures, the impeller suspension is a torsion tube. To insure the possibility of measuring the flow of liquids moving in both forward and reverse directions, the supply source of the device creating the retarding moment is connected in the diagonal of a bridge whose two adjacent arms are a slide wire.

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L 38261-65
ACCESSION NR: AP5008214

An indicator device having a zero center scale is connected in the second diagonal of the bridge in series with the device creating the retarding moment. Orig. art. has: 1 diagram.

ASSOCIATION: none

SUBMITTED: 18May63 ENCL: 01 SUB CODE: PR

NO REF SOV: 000 OTHER: 000

Card 2/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

MUKHIN, Georgiy Ivanovich; POTAPKIN, Mikhail Petrovich [deceased]; SMIRNOVA, N.P., redaktor; MAKHOVA, N.N., tekhnicheskiy redaktor

[Australia; a survey of its physical and economic geography. A manual for teachers] Avstraliia; fiziko-geograficheskii i ekonomiko-geograficheskii obzory. Posobie dlia uchitelia. Moskva, Gos. uchebno-pedagog. izd-vo Ministerstva prosveshcheniia RSFSR, 1956. 253 p. (MLRA 10:3)
(Australia—Geography)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, N., kapitan; STYRIKOV, D., mayor

Proposals for radio communications. Tankist no.7:57-58 Jl '58.
(Radio, Military) (MIRA 11:10)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

NOVIKOV, A.B.; SOLOV'YEV, N.A.; POTEMKIN, N.A.

Pneumatic mandrel for gripping thin-walled parts. Avt.prom. 28 no.1:43 Ja '62. (MIRA 15:2)

1. Yaroslavskiy motornyy zavod.
(Lathes)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

RASHINSKIY, Z.V., inzh.; POTEMKIN, N.A., inzh.

Automatization of the match-stick wood feeding and distribution in automatic match machines. Der. prom. 8 no.8, 22-24 Ag '59. (MIRA 12:12)

(Match industry)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

RASHINSKIY, Z.V., inzh.; POTEMKIN, N.A., inzh.

Hoisting and centering attachment for the SPLU peeling machine.
Der. prom. 7 no.8:21-22 Ag '58. (MIRA 11:9)

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya spichechnoy promyshlennosti.
(Woodworking machinery--Attachments)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, N.D., akademik

On the improvement of animal breeding. Zhivotnovodstvo 19 no.11:66-73 N '57. (MIRA 10:12)

1. Deystvitel'nyy chlen Vsesoyuznoy Akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina.
(Stock and stockbreeding)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, N., akademik.

Animal husbandry in England. Nauka i pered. op. v sel'khoz 8 no.12:66-71 D '58. (MIRA 12:1)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I. Lenina.
(Great Britain--Stock and stockbreeding)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, N.F., inzh.; KOZULIN, N.A., doktor tekhn.nauk

Investigating sliding friction bearings manufactured from Teflon under conditions of direct and reverse friction forces. Khim. i neft. mashinostr. no.2:16-18 F '65.

(MIRA 18:4)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

MORKVA, V.D., gornyy inzh.; POTEMKIN, N.I., gornyy inzh.; KUCHERUGA, A.Ya., gornyy inzh.

Making upraises in the Krivoy Rog Basin by the sectional blasting of holes. Gor. zhur. no.5:71-72 My '65. (MIRA 18:5)

1. Nauchno-issledovatel'skiy gorno-rudnyy institut, Krivoy Rog.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

SAMORODSHENKO, A.I., inzh.; MARKOVA, V.D., inzh.; [illegible], M.I., inzh.

Making oil meters of an optimum in oil dep. Shakht. stroi. 9 no.5:25-26 My '65. (MIRA 18:6)

1. Shakhtoprokhodcheskoye upravleniye No.1, g. Krivoy Rog (for Samorodshenko). 2. Nauchno-issledovatel'skiy gornorudnyy institut (for Potemkin).

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, P. (Novosibirsk)

Current problems in the economics of the eastern regions of the U.S.S.R. Vop. ekon. no.2:158-160 F '63. (MIRA 16:3)
(Siberia--Economic research)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, P.

Differential income in the mining industry under socialism. Vop. ekon. no.9:83-89 S '60. (MIRA 13:8)
(Coal mines and mining--Finance)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, P. (Novosibirsk); ZAKHAROV, G. (Novosibirsk)

"Production costs in the heavy industry of the U.S.S.R." by R. S. Livshits. Reviewed by P. Potemkin, G. Zakharov. Vop. ekon. no.12:111-113 D '62. (MIRA 16:1)

(Costs, Industrial)
(Livshits, R. S.)

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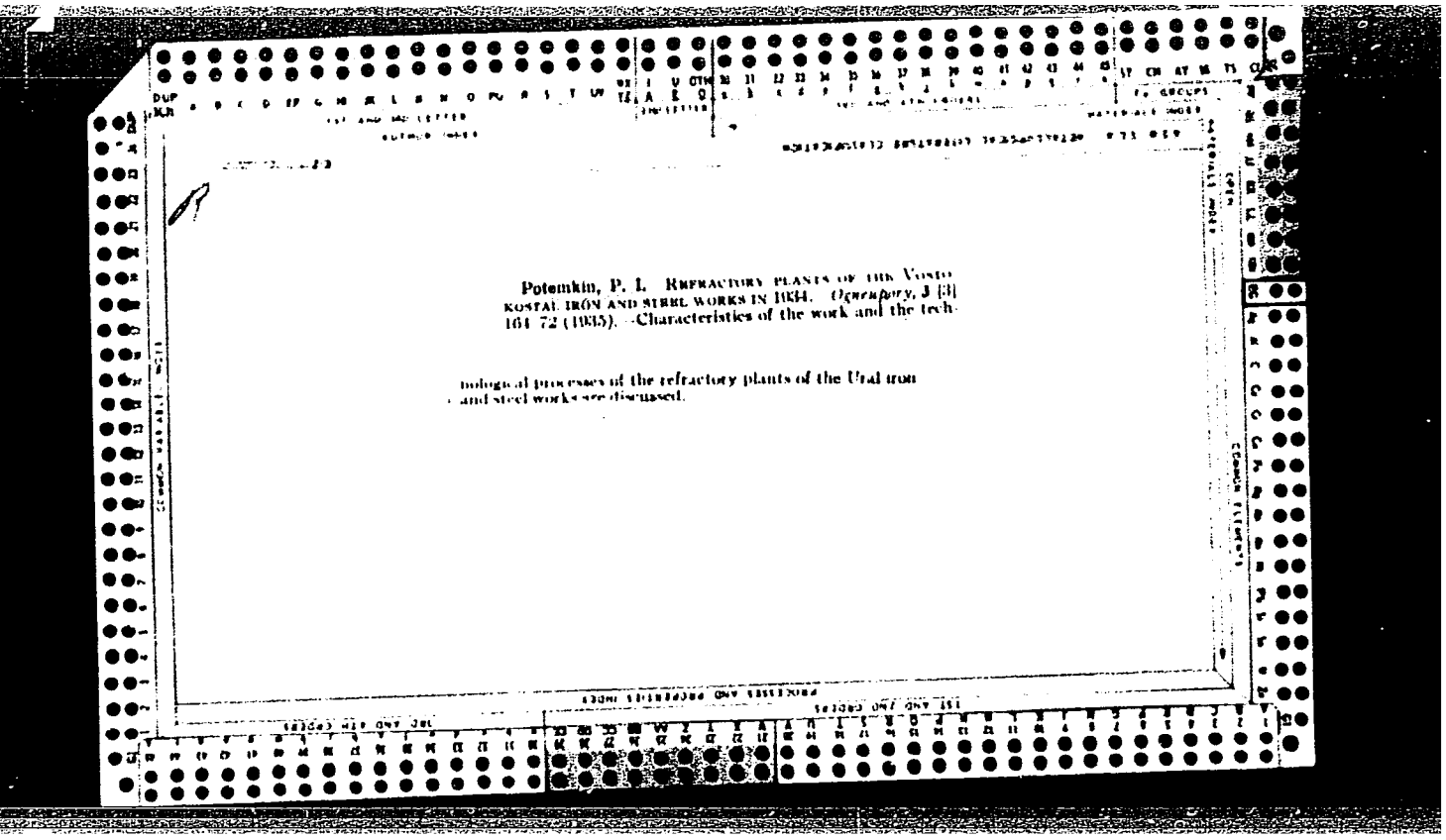

Potemkin, P. I. REFRACTORY PLANTS OF THE VOSTO-KOSTAL IRON AND STEEL WORKS IN 1934. *Ogneupory*, 3 [3] 164–72 (1935). —Characteristics of the work and the technological processes of the refractory plants of the Ural iron and steel works are discussed.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, P. I.

"Investigation of the Effect of Burning-out Additions on the Physical Properties of Porous Ceramic Products." Thesis for degree of Cand. Technical Sci. Sub 22 Feb. 49, Central Sci Res Inst of Industrial Structures.

Summary 82, 18 Dec 52, Dissertations Presented For Degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN,P.;ROKHVARGER,Ye.

Wall panels made from lightened clay and lightweight reinforced concrete. Stroi.mat., izdel. i konstr. 1 no.8:10-13 Ag'55. (MLRA 8:11)

1. Starshiy nauchnyy sotrudnik Nauchno-issledovatel'skogo instituta Stroykeramiki (for Potemkin) 2. Zamestitel' direktora instituta po nauchnoy chasti (for Rokhvarger)
(Walls) (Lightweight concrete)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

Potemkin, P.I.

LOPOWOK, L.I.; POTEMKIN, P.I.; CHIBUNOWSKIY, N.C.

Problems involved in the design of façade ceramics. Stek. i ker. 12 no.10:18-21 O '55. (MLRA 9:1)
(Ceramic industries)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, P.I.

Accelerated development of new enterprises as a large potentiality of production. Izv. Sib. otd. AN SSSR no. 11:160-162 '62. (MIRA 17:9)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, Petr Ivanovich; SOMINSKIY, V.S., prof., otv. red.; SHITSARENKO, A.A., red.

[Essays on the methods of evaluating the projected efficiency of new enterprises] Ocherki o metodakh otsenki proektnoi effektivnosti novykh predpriiatii. Novosibirsk, Red.izd. otdel Sibirskogo otd-niia AN SSSR, 1964. 68 p. (MIRA 17:12)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

KOROVINA, Zinaida Pavlovna; IGOL'NIKOV, Grigoriy L'vovich;
POTEMKIN, P.I., kand. ekon. nauk, otv. red.;
SHITSARENKO, A.A., red.

[Overall improvement in planning in industry] Kompleksnoe
sovershenstvovanie planirovaniia v promyshlennosti, Novo-
sibirsk, Red.-izdatel'skii otdel Sibirskogo otd-niia AN
SSSR, 1964. 44 p. (MIRA 17:9)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

ASTAKHOV, Aleksandr Semenovich, kand. ekon. nauk; ZEBZIYEV, K.V., retsenzent; SOKOLINSKIY, K.V., retsenzent; POTEMKIN, P.I., retsenzent

[Linear programming in mining] Lineinoe programmirovanie v gornom dele. Moskva, Izd-vo "Nedra," 1964. 143 p. (MIRA 17:7)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

SOMINSKIY, V.S., doktor ekon. nauk, prof., red.; PATRUSHEV, V.D., otv. red.; BELOUSOVA, V.S., red.; POTEMKIN, P.I., red.; SNITSARENKO, A.A., red.; CVCHINNIKOVA, T.K., tekhn. red.

[Economic problems of mastering new enterprises] Ekonomicheskie voprosy osvoeniia novykh predpriiatii. Pod obshchei red. V.S.Sominskogo. Novosibirsk, Izd-vo Sibirskogo otdniia, 1963. 231 p. (MIRA 16:11)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut ekonomiki i organizatsii promyshlennogo proizvodstva.
(Industrial management)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, P.I., kand.ekon.nauk

Economic problems in the coping with new Kuznetsk Basin mines.
Shakht.stroi. 8 no.1:9-11 Ja '64. (MIRA 17:

1. Institut ekonomiki i organizatsii promyshlennogo proizvodstva AN SSSR, Sibirskoye otdeleniye.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

VOLODARSKIY, N.I.; POTSELUYEVA, V.G.

Effect of gibberellin and the length of the day on the development of teasel. Dokl. AN SSSR 154 no.2:476-479 Ja'64. (MIRA 17:2)

1. Kubanskiy sel'skokhozyaystvennyy institut, Krasnodar. Predstavleno akademikom A.L. Kursanovym.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

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POTEMKIN, Petr Ivanovich; PRUDENSKIY, G.A., otv. red.; OMBYSH-KUZNETSOV, S.O., red.; YELISTRATOVA, Ye.M., tekhn.red.

[Why labor productivity should grow more rapidly than wages] Pochemu proizvoditel'nost' truda dolzhna rasti bystree zarabotnoi platy. Novosibirsk, Izd-vo Sibirskogo otd-niia AN SSSR, 1963. 36 p. (MIRA 16:8)

1. Chlen-korrespondent AN SSSR (for Prudenskiy).
(Wages and labor productivity)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

MEKKEL', Sara Abramovna; POTEMKIN, P.I., kand.ekon. nauk, otv. red.; KUPAYEVA, L.A., red.; LOKSHINA, O.A., tekhn. red.

[Analysis of the potentials of lowering labor consumption as exemplified by the coal industry of the Kuznets Basin]Analiz rezervov snizheniia trudoemkosti na primere ugol'noi promyshlennosti Kuzbassa. Novosibirsk, Izd-vo Sibirskogo otd-nie, 1962. 54 p. (MIRA 15:12)
(Kuznetsk Basin--Coal mines and mining--Labor productivity)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, Petr Ivanovich; NIKANOROV, I.M., otv. red.; OMBYSH-KUZNETSOV, S.O., red.; LOKSHINA, O.A., tekhn. red.

[Regional features of the planning of costs in the mining industry]Regional'nye osobennosti planirovaniia tsen v gornoi promyshlennosti. Novosibirsk, Izd-vo Sibirskogo otdniia AN SSSR, 1962. 114 p. (MIRA 15:8)
(Coal mines and mining--Costs)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PEVZNER, R.L., prof., doktor tekhn.nauk; POTEMKIN, P.I., kand.tekhn.nauk

Studying and introducing results of investigations and industrial practices in the field of producing lightweight aggregates. Trudy NII Stroikeramiki no. 14:54-72 '59. (MIRA 14:1)
(Aggregates (Building materials)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

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POTEMKIN, P.I., kand.tekhn.nauk

Thin ceramic mosaic-type facing tiles. Trudy NIIStroikeramiki no.13:188-202 '58. (MIRA 12:5)
(Mosaics) (Ceramics)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, P.P.; TARTYSHEV, N.N.

"Effect of the rate of mining and of natural conditions on the cost of coal" by A.S.Astakhov. Reviewed by P.P.Potemkin, N.N. Tartyshev. Ugol' 35 no.6:63-64 Je '60. (MIRA 13:7)
(Coal mines and mining--Costs)
(Astakhov, A.S.)

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POTEMKIN, P.S.

Aerodynamics of a finished bar of [illegible] [illegible]
Ogneupory 30 no.4:[illegible] '65. [illegible]

1. Vsesoyuznyy institut ogneuporov.

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POTEMKIN, P.S.; SHUMILIN, A.A.; KURDIANI, G.P.; KHAZARADZE, M.I.; TYRTYSHNYY, A.Ye.

Firing Dankov dolomites in rotary kilns. Ogneupory 28 no.9: 389-392 '63. (MIRA 16:10)

1. Vsesoyuznyy institut ogneuporov (for Potemkin, Shumilin).
2. Rustavskiy metallurgicheskiy zavod (for Kurdiani, Khazaradze).
3. Dankovskiy dolomitovyy kombinat (for Tyrtyshnyy).

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POTEMKIN, P.S.; SHUMILIN, A.A.; SHALKOV, K.A. [deceased]; YAKOVLEV, A.I.

Simultaneous grinding and drying of fireclays in shaft mills.
Ogneupory 28 no.2:63-67 '63. (MIRA 16:2)

1. Vsesoyuznyy institut ogneuporov (for Potemkin, Shumilin).
2. Borovichskiy kombinat ogneuporov (for Shalkov, Yakovlev).

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, P.S.

Velocity of gases at the limit of carrying away clay and fireclay particles. Ogneupory 26 no.11:507-510 '61. (MIRA 17:2)

1. Vsesoyuznyy institut ogneuporov.

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15(0)
AUTHORS: Karklit, A. K., Potemkin, P. S. SOV/131-59-1-9/12

TITLE: Conference of Young Specialists (Konferentsiya molodykh spetsialistov)

PERIODICAL: Ogneupory, 1959, Nr 1, pp 47-47 (USSR)

ABSTRACT: This conference of young specialists of the Vsesoyuznyy institut ogneuporov (All Union Institute of Refractories) was held in Leningrad on November 13-14, 1958, with the participation of representatives of the youth workers and the Ukrainskiy institut ogneuporov (Ukrainian Institute of Refractories). The conference should represent a show of young engineers and technicians. N. P. Gordeyev, head of the Institute, outlined in his opening speech the work of young specialists of various special branches, designating it as successful. Further, the following reports are mentioned:
V. G. Yeger spoke about manufacturing methods of superstable pantiles made of boric siliceous rocks (borovichskaya "kremnevka").
N. V. Meshalkina reported on test results of the properties of magnesium solutions on liquid glass.
I. V. Vishnevskiy (UNIIO) reported on the dynamic method of

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determination of the modulus of elasticity at temperatures up to 1300-1400°.
G. G. Mel'nikova spoke about the examination of the changes of phase composition of worn-out refractory magnesite-chromite products.
N. V. Semkina reported on elaboration results of spectroscopic methods for the alumina content in types of clay.
V. G. Sloushch stated the causes of bar fracture of the press CM-143 by means of tensometration.
G. A. Koba used a tensometric transmitter for the automatic control of mold charging on the press SM-143.
V. M. Lebedev reported on the working out of the design for a new furnace cart.
V. Z. Shron reported on sample taking devices of a new system.
A. M. Levin reported on the design of water supply and canalization.
M. Z. Perel'son dealt with questions of air dust collection.
M. M. Perel'muter, Ye. A. Grechneva and others submitted a new variant for the foundation of a tunnel kiln.
A. Z. Verdel' reported on the beginning of operation and installation of a rotary furnace at the Borovichskiy kombinat

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

Conference of Young Specialists SOV/131-59-1-9/12

(Borovichi Kombinat).

As a principal default it was stated that part of the young specialists are still insufficiently familiar with the production. The measures provided for by the Party and Government to reform the universities and to strengthen their relations to works in operation shall improve the training of specialists.

ASSOCIATION: Vsesoyuznyy institut ogneuporov (All-Union Institute of Refractories)

Card 3/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, P. S

AUTHOR: Kamenichnyy, M. S.

TITLE: News in Brief (Kratkiye soobshcheniya). Production of Ultralight Refractory Products (Proizvodstvo ul·tralegkovesnykh ogneuporov)

PERIODICAL: Ogneupory, 1958, Nr 6, pp. 284-285 (USSR)

ABSTRACT: In March 1958 a meeting took place at the Snigirevo Works for Refractory Products which had been called by the Department for Refractory Products of the Scientific-Technical Society for Metallurgy, and which was devoted to the problem of the mechanization of the production of ultralight refractory products. More than 60 persons took part in the meeting: representatives of the works for refractory materials, of the Leningrad Institute for Refractory Materials, as well as of other organizations. The following reports were heard:

1) Ye. A. Fedorova on the technology of the production of ultralight refractory products.

2) I. G. Ul'fskiy on machines for molding and grinding light refractory materials.

Card 1/3

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

News in Brief.
Production of Ultralight Refractory Products

[illegible] 58 6-11/14

3) P. S. Potemkin on the drying and burning of refractory light products.
4) M. A. Ratinovich on the experience in the production of refractory light materials at the Snigirevo works.

The isolation properties of these products are 2 - 3 times better than those of the other light refractory products. Experiments at the Leningrad Institute for Refractory Products carried out with ultralight refractory products (weight by volume 0,3 - 0,4 g/m^2) showed that the heat losses decreased by 47 %, the heating period of the kiln by 26 %, and the output per hour increased per 19 %. The production of these products as well as of the usual foamy ones is based on the foaming of water suspensions of clay and chamotte. The mass of the ultralight products contains 80 % of clay and 20 % of chamotte, whereas the mass of the usual light products contains 10 % of clay and 90 % of chamotte. The drying of the ultralight products requires a mild regime and lasts 5 - 6 days. The shrinkage exceeds 15 % which easily causes cracks.

Card 2/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

News in Brief.

Production of Ultralight Refractory Products

131-58-6-11/14

The burning of ultralight products takes place together with other products in annular kilns. The meeting decided upon recommendations for the mechanization of the molding process and the perfection of drying and burning. A further development of this production was recommended.

1. Refractory materials--Production 2. Industrial plants--Automation
3. Machines--Performance

Card 3/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, S.

Tret'is ochered' Metro. [Third stage of Moscow Subway]. Moskva, Moskovskii bol'shevik, 1945. 94 p. illus., ports.
Popular book on the history and accomplishments of Moscow's subway system through the third stage; brief summary of fourth stage, with illustrations. The program for the new, fourth stage of development of Moscow's subway system calls for a large underground ring to connect with previously constructed three stages of sixteen Moscow districts where over two million people live. The new line, 20 kims long, will extend underground transportation to the southern-most part of the city and on the east northern side between the green belt and Kamer-Kollezhskii bank, with twelve new stations, six of which are transfer stations.

DLC: TF847.M65P6

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

ZHIVOTOVSKIY, Aleksandr Andreyevich; POTEMKIN, S.V., spetsial'nyy red.; STEBAKOVA, L.N., red.; BODANOVA, A.P., tekhn.red.

[New equipment and techniques for placer mining in the Northeastern U.S.S.R.] Novaia tekhnika i tekhnologiia na razrabotke rossypei Krainego Severo-Vostoka SSSR. [Magadan] Magadanskoe knizhnoe izd-vo, 1957. 103 p. (MIRA 11:2)
(Russia, Northeastern--Hydraulic mining)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, S V

137-1958-3-4545

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 11 (USSR)

AUTHORS: Potemkin, S. V.

TITLE: The Major Task of the Staff of the Magadan Scientific Research Institute (Glavnaya zadacha kollektiva Magadanskogo nauchno-issledovatel'skogo instituta)

PERIODICAL: Kolyma, 1957, Nr 5, pp 41-43

ABSTRACT: A report on the major investigations carried on by the staff of the Institute, and the significance of these investigations for the industry of the North-East by providing assistance to the workers of the mining enterprises in fulfilment of plans for the mining of the metal and the reduction of production costs. The staff of the Institute regards the solution of practical problems in the mining industry of the region as its primary task.

A. Sh.

Card 1/1

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

RUSAKOV, Viktor Pavlovich; SHILO, N.A., otv.red.; POTEMKIN, S.V., zam.otv. red.; ALEKSANDROV, P.P., red.; APEL'TSIN, F.R., red.; BEREZIN, V.P., red.; KALABIN, A.I., red.; KUZNETSOV, G.G., red.; MATSUYEV, L.P., red.; NUZHDIN, I.I., red.; FIRSOV, L.V., red.; FOMENKO, T.G., red.; VANSHEYDT, N.A., red.

[Choice of an efficient mining method for thick coal seams of the Nizhne-Arkagala deposit] Vybor ratsional'noi sistemy razrabotki moshchnykh ugol'nykh plastov Nizhne-Arkagalinskogo mestorozhdeniia. Magadan, 1958. 15 p. (Magadan. Vsesoiuznyi nauchno-issledovatel'skii institut zolota i redkikh metallov. Trudy. Gornoe delo. no.18) (MIRA 12:5)
(Magadan Province--Coal mines and mining)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

GAVRIKOV, Sergei Ivanovich; SHILO, Nikolay Alekseyevich, otv.red.; POTEMKIN, S.V., zam.otv.red.; ALEKSANDROV, P.P., red.; APEL'TSIN, F.R., red.; BEREZIN, V.P., red.; KALABIN, A.I., red.; KUZNETSOV, G.G., red.; MATSUYEV, L.P., red.; NUZHDIN, I.I., red.; PIRSOV, L.V., red.; POPENOV, T.G., red.; SHAKHNAROVICH, L.A., red.

[Division of the upper Indigirka Valley into tectonic regions] O tektonicheskom raionirovanii basseina verkhnego techeniia r. Indigirki. Magadan, 1958. 17 p. (Magadan, Vsesoiuznyi nauchno-issledovatel'skii institut zolota i redkikh metallov. Trudy. Geologiia, no.3?). (MIRA 12:4)

(Indigirka Valley--Geology, Structural)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

FOMENKO, Timofey Grigor'yevich; SHILO, N.A., otv.red.; POTEMKIN, S.V., zam. otv.red.; ALEKSANDROV, P.P., red.; APEL'TSIN, F.R., red.; BEREZIN, V.P., red.; KALABIN, A.I., red.; KUZNETSOV, S.G., red.; MATSKYAT, L.P., red.; NUZHDIN, I.I., red.; FIRSOV, L.V., red.; FOMENKO, T.G., red.; VANSHEYDT, N.A., red.

[Principles of the ore dressing process with use of concentrating tables] Osnovy protsessa obogashchheniia rud na kontsentratsionnykh stolakh. Magadan, 1958. 35 p. (Magadan. Vsesoiuznyi nauchno-issledovatel'skii institut zolota i redkikh metallov. Trudy. Obogashchenie i metallurgiia, no.27). (MIRA 12:4)
(Ore dressing--Equipment and supplies)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

MATSUYEV, Leonid Petrovich; SHILO, N.A., otv.red.; POTAPKIN, S.V., zam.otv. red.; ALEKSANDROV, P.P., red.; APEL'TSIN, F.R., red.; BEREZIN, V.P., red.; KALABIN, A.I., red.; KUZNETSOV, G.V., red.; KUZHDIN, I.I., red.; FIRSOV, L.V., red.; FOMENKO, T.G., red.; SHAKHNAROVICH, L.A., red.

[Regularities in the process of disintegration and screening in washing cleaners and trommels] Nekotorye zakonomernosti dezintegratsii i grokhocheniia v stiral'nykh i drachurkh bochkakh. Magadan, 1958. 36 p. (Magadan. Vsesoiuznyi nauchno-issledovatel'skii institut zolota i redkikh metallov. Trudy. Obogashchenie i metallurgiia, no.26). (MIRA 12:4)

(Ore dressing) (Screens (Mining))

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PETROV, Appolinariy Stepanovich; SHILO, N.A., otv.red.; ALEKSANDROV, P.P., red.; APEL'TSIN, F.R., red.; BEREZIN, V.P., red.; KALABIN, A.I., red.; KUZNETSOV, G.G., red.; MATSUYEV, L.P., red.; NUZHDIN, I.I., red.; POTEMKIN, S.V., red.; FIRSOV, L.V., red.; FOMENKO, T.G., red.; VANSHEYDT, N.A., red.

[Production and use of soil concrete blocks in the construction of buildings of few stories] Proizvodstvo i primenenei gruntoblokov v maloetazhnom stroitel'stve Magadan, 1958. 47 p. (Magadan. Vsesoiuznyi nauchno-issledovatel'skii institut zolota i redkikh metallov. Trudy. Mestnye stroimaterialy, no.7) (MIRA 12:5)

(Soil cement) (Building blocks)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

KARTASHOV, Ivan Pavlovich; SHILO, N.A., otv. red.; POLYAKOV, S.V., zam. otv. red.; [illegible], red.; APRODOV, V.A., red.; BUTAKOV, V.P., red.; KALABIN, A.I., red.; [illegible], red.; [illegible], L.P., red.; MUZHDIN, I.I., red.; PIRSOV, L.V., red.; [illegible], red.; SHAKHMAROVICH, L.A., red.

[Principles for making geomorphological prognosis maps of placer deposits] O printsipakh postroeniia geologo-geomorfologicheskikh prognoznykh kart rossypei. Magadan, 1958. 49 p. (Magadan, Vsesoiuznyi nauchno-issledovatel'skii institut zolota i redkikh metallov. Trudy. Geologiia, no.37). (MIRA 12:4)

(Ore deposits--Maps)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

KALABIN, Aleksey Il'ich; SHILO, N.A., otv.red.; POZHARSKIY, S.V., zam.otv.red.; ALEKSANDROV, P.P., zam.otv.red.; ALEKSANDROV, P.P., red.; APOL'SKIY, P.R., red.; POKHIAO, T.S., red.; BERZIN, V.P., red.; KUZNETSOV, G.G., red.; MATSUYEV, L.P., red.; NUZHDIN, I.I., red.; FIRSOV, L.V., red.; VANSHEYDT, N.A., red.

[Underground waters in the northeastern part of the U.S.S.R.] Podzemnye vody Severo-Vostoka SSSR. Magadan, 1958. 85 p. (Magadan. Vsesoiuznyi nauchno-issledovatel'skii institut zolota i redkikh metallov. Trudy. Mineralogicheskie, no.9). (MIRA 12:4)
(Russia, Northern--Water, Underground)
(Frozen ground)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

FIRSOV, Lev Vasil'yevich; SHILO, N.A., otv.red.; POTEMKIN, S.V., zam.otv.red.; ALEKSANDROV, P.P., red.; APEL'TSIN, F.R., red.; BEREZIN, V.P., red.; KALABIN, A.I., red.; KUZNETSOV, G.G., red.; MATSUYEV, L.P., red.; MUZHDIN, I.I., red.; FOMENKO, T.G., red. (MIRA 12:4)

[Structure, morphology, and mineralization of the Igumenskoye gold deposit] Struktura, morfologiia, mineralogiia i orudenenie Igumenovskogo zolotorudnogo mestorozhdeniia. Magadan, 1958. 71 p. (Magadan, Vsesoiuznyi nauchno- issledovatel'skii institut zolota i redkikh metallov. Trudy, no.33)
(Tenke Valley--Gold ores)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

KASHTANOV, I.N., glav. red.; BEREZIN, V.P., red.; IOSIFOVICH, N.L., red.; POTEMKIN, S.V., red.; SHILO, N.A., doktor geol.-miner. nauk, prof., red.; FROLOVA, M.F., red.

[10 years of Magadan Province] 10 let Magadanskoi oblasti. Magadan, Magadanskoe knizhnoe izd-vo, 1963. 210 p. (MIRA 17:8)

1. Direktor kompleksnogo nauchno-issledovatel'skogo instituta Sibirskogo otdeleniya AN SSSR (for Shilo). 2. Direktor nauchno-issledovatel'skogo instituta zolota i redkikh metallov (for Potemkin). 3. Sekretar' oblastnogo komiteta KPSS (for Kashtanov).

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

ANDRIANOV, Aleksandr Alekseyevich; POTEMKIN, S.V., glavnyy red.; MATSUYEV, L.P., zamestitel' glavnogo red.; SHAKHNAROVICH, L.A., red.; BEREZIN, V.P., red.; VESELOV, V.V., red.; GOLANDSKIY, D.B., red.; GOL'DTMAN, V.G., red.; IGNATENKO, M.A., red.; SHASHURA, M.V., red.; RIVKIN, G.M., red.; FIRSOV, L.V., red.; SHEPELEV, I.T.

[Methods of analytic decomposition of cassiterite and tin ores] Metody analiticheskogo razlozheniia kassiterita i rud olova. Magadan, 1962. 14 p. (Magadan. Vsesoiuznyi nauchno-issledovatel'skii institut zolota i redkikh metallov. Trudy Obogashchenie i metallurgiia, no.53). (MIRA 16:7)
(Cassiterite--Analysis) (Tin ores--Analysis)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

RED'KIN, V.K.; POTEMKIN, S.V., glavnyy red.; MATSUYEV, L.P., zamestitel' glavnogo red.; SHAKHNAROVICH, L.A., red.; BEREZIN, V.P., red.; VESELOV, V.V., red.; GOLANDSKIY, D.B., red.; GOL'DTMAN, V.G., red.; IGNATENKO, M.A., red.; SHASHURA, M.V., red.; RIVKIN, G.M., red.; FIRSOV, L.V., red.; SHEPELEV, I.T., red.

[Grounding and protective cutting-off in underground workings of permafrost placer deposits.] Zazemleniia i zashchitnye otkliucheniia pri podzemnoi razrabotke mnogoletnemerzlykh rossypei. Magadan, Vses. nauchno-issl. in-t zolota i redkikh metallov, 1962. 26 p. (Magadan, Vsesoiuznyi nauchno-issledovatel'skii institut zolota i redkikh metallov. Trudy, Gornoe delo, no.40) (MIRA 16:6)

(Kolyma Valley—Electric protection)
(Kolyma Valley—Placer deposits)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, S.V., glav. red.; MATSUYEV, L.P., zam. glav. red.; BEREZIN, V.P., red.; VESELOV, V.V., red.; GOLANDSKIY, D.B., red.; GOL'DTMAN, V.G., red.; IGNATENKO, M.A., red.; SHASHURA, M.V., red.; RIVKIN, G.M., red.; FIRSOV, L.V., red.; SHAKHNAROVICH, L.A., red.; SHEPELEV, I.T., red.; SHAROVA, L.A., red.

[Reports for 1961] Sbornik referatov za 1961 god. Magadan, 1962. 135 p. (Its: Trudy VNII-1) (MIRA 16:7)

1. Magadan. Vsesoyuznyy nauchno-issledovatel'skiy institut zolota i redkikh metallov.
(Frozen ground) (Mining engineering) (Metallurgy)
(Building materials)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

SOSNOVSKIY, Nikolay Pavlovich; KAZURINA, Nadezhda Mikhaylovna; SHILO, N.A., otv.red.; POTEMKIN, S.V., zam.otv.red.; ALEKSANDROV, P.P., red.; KUZNETSOV, G.G., red.; MATSUYEV, L.P., red.; MUZHDIN, I.I., red.; FIRSOV, L.V., red.; FOMENKO, T.G., red.; SHAKHNAROVICH, L.A., red.

[Treatment of hard to concentrate tin-tungsten ores] Obrabotka trudnoobogatimoi olovianno-vol'framovoi rudy. Magadan, 1958. 26 p. (Magadan, Vsesoiuznyi nauchno-issledovatel'skii institut zolota i redkikh metallov. Trudy. Obogashchenie i metallurgiia, no.28). (MIRA 13:4)

(Tin ores) (Tungsten ores) (Ore dressing)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, S.V., gornyy inzh.

Systems of underground mining of permafrost placers. Gor. zhur. no.7:20-24 Jl '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zolota i redkikh metallov.
(Hydraulic mining) (Frozen ground)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

MANUYLOV, Pavel Ivanovich; GALKIN, Georgiy Semenovich; SHILO, N.A.,otv.red.; POTEMKIN, S.V.,zam.otv.red.; ALEKSANDROV, P.P.,red.; APEL'TSIN, F.R., red.; BEREZIN, V.P.,red.; KALABIN, A.I.,red.; KUZNETSOV, G.G.,red.; MATSUYEV, L.P.,red.; NUZHDIN, I.I.,red.; FIRSOV, L.V.,red.; FOMENKO, T.G.,red.; SHAKHNAROVICH, L.A.,red.

[Peat lifting by means of excavating machinery in stripping placer deposits in the Northeastern U.S.S.R.] Vskrysha torfov zemleroinymi mashinami na priiskakh Severo-Vostoka SSSR. Magadan, 1958. 68 p. (Magadan. Vsesoiuznyi nauchno-issledovatel'skii institut zolota i redkikh metallov. Trudy. Gornoe delo no.19) (MIRA 12:5)

(Soviet Far East--Gold ores) (Peat) (Excavating machinery)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

SHILO, Nikolay Alekseyevich; POTEMKIN, S.V., zam.otv.red.; ALEKSANDROV, P.P., red.; APEL'TSIN, F.R., red.; BEREZIN, V.P., red.; KALABIN, A.I., red.; KUZNETSOV, G.G., red.; MATSUYEV, L.P., red.; NUZHDIN, I.I., red.; FIRSOV, L.V., red.; FOMENKO, T.G., red.; SHAKHNAROVICH, L.A., red.

[Some principles for classifying placer deposits] Nekotorye printsipy rossypnykh proiavlenii. Magadan, 1958. 20 p. (Magadan, Vsesoiuznyi nauchno-issledovatel'skii institut zolota i redkikh metallov. Trudy, Geologiia, no. 36). (MIRA 12:4)
(Ore deposits--Classification)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

18(7)
AUTHORS: Potemkin, V., Chukina, G.

SOV/155-58-5-34/37

TITLE: Investigation of the Germanium Noise for low Temperature

PERIODICAL: Nauchnyye doklady vysshey shkoly. Fiziko-matematicheskiye nauki,1958,Nr 5,pp 201-204 (USSR)

ABSTRACT: In the frequency range 500 Hz up to 8 kHz the dependence of the germanium noise on the temperature was measured in the interval + 20° C - 180° C. The authors state that the noise decreases about exponentially with decreasing temperature. The noise was generated by direct current, amplified in a 4-cascade amplifier (about $5 \cdot 10^5$ times) and led into a spectroscopic analyzer. The change in temperature took place very slowly (1° in 15 minutes), the error of the measurement of temperature was ± 2°. The measured noise figures are registered in a diagram.
There are 2 figures and 2 American references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova (Moscow State University imeni M.V. Lomonosov)

SUBMITTED: April 24, 1958

Card 1/1

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, V.; CHUKINA, G.

Noises of germanium at low temperatures. Nauch.dokl.vys.shkoly; fiz.-mat.nauki no.5:201-204 '58. (MIRA 12:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Germanium)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

RAZUMOVA, Tat'yana Zotovna; POTEMKIN, V., red.; PAVLOV, A., tekhn.red.

[Growth of the prosperity of workers in the Kuznetsk Basin] Rost blagosostoianiia trudiashchikhsia Kuzbassa. Kemerovo, 1958. 18 p. (MIRA 12:7)
(Kuznetsk Basin--Economic conditions)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

BEREZIN, N.; PISAREV, N.; POTEMKIN, V.; TSEREVITINOV, G.

"Fishery products" by V.I.Vzorov. Reviewed by N.Berezin and others. (MIRA 15:4)
Sov.torg. 35 no.4:37-38 Ap '62.
(Fishery products) (Vzorov, V.I.)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, V. I. and SHCHERBININ, I. V.

"Treatment of Parafilariasis in Horses with Antimonyl Potassium Tartrate,"

Veterinariya, No. 4, 1948.

Intravenous injections of 100 ml 2% solution (warmed to body temp) daily for 3 days with 1-2 day intervals leads to steady reduction of leucocyte count, no change in erythrocytes, and disappearance of spot hemorrhages.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

ROSENKIN, V. I.

"Diagnostics of Gastrophilus in Horses." Thesis for degree of Cand. Veterinary Sci., Sub 1 Jun 49, Moscow Veterinary Academy.

Summary 82, 18 Dec 52, Dissertations Presented For Degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, V. I., Cand. of Vet. Sci.
"Concerning the staining of trichomonads."
SO: Veterinariya 28(5), 1951, p. 60

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, V.I.

Use of methoxychlor in hypodermosis (warble fly infestation) of cattle. Trudy VNIIVSE 11:171-172 '57. (MIRA 11:12)
(Warble flies) (Ethane)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, V.I., kand. vet. nauk.

Use of chlorophos in controlling flies in livestock farms. Veterinariia 35 no.6:51-52 Je '58. (MIRA 11:6)

1. Moskovskaya veterinarnaya akademiya.
(Phosphonic acid) (Flies--Extermination)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, V.I., kand.vet.nauk; GIL'DENBLAT, A.A., kand.vet.nauk

Use of chlorophos in infestation of Hypoderma bovis in cattle.
Veterinariia 36 no.2:86-87 F '59. (MIRA 12:2)

1. Moskovskaya veterinarnaya akademiya.
(Phosphonic acids) (Warble flies)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

L 27909-66 EWT(m)/EWA(d)/T/EWP(t)/ETI/EWP(k) IJP(c) JD/DJ

ACC NR: AP6017714 SOURCE CODE: UR/0122/66/000/003/0069/0072

AUTHOR: Sipaylov, V. A. (Engineer); Yakimov, A. V. (Candidate of technical sciences); Potemkin, V. I. (Engineer); Ivanov, S. A. (Engineer)

ORG: none

TITLE: Phenomena which take place in the surface layer during grinding

SOURCE: Vestnik mashinostroyeniya, no. 3, 1966, 69-72

TOPIC TAGS: steel, case hardening, annealing, tempering, transmission gear, hardness, grinding, cold working, thermocouple, potentiometer, metallographic examination/12Kh2N4A steel

ABSTRACT: The combination of mechanical and thermal effects which accompany the grinding process causes a considerable change in the physical and chemical state of the surface layer in many cases which may reduce the bearing capacity of components; therefore, it is important to study the thermal processes which take place in the surface layer during grinding and to seek methods for controlling these processes.

Cylindrical spur gears (m = 3.85 mm, z_k = 31, α' = 20°, b = 35 mm) made from 12Kh2N4A steel were studied. The gears were case hardened to a depth of 1.1-1.3 mm at 900° centigrade, annealed at 650° C, double annealed at 860±20°C and at 800±20°C, cold-worked in liquid nitrogen and tempered at 150±10°C. The experiments were done on a Maag SS30Kh gear hob. An EB25M2K wheel was used for removing a decarburized layer of 0.1 mm in 10 passes at t = 0.008-0.01 mm,

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v_{kv} = 27 m/sec, s_{np} = 100 mm/min and n = 225 oscillations per minute. After preliminary grinding the experiments were done with the same wheel at t = 0.02, 0.04, 0.06 and 0.08 mm, s_{np} = 100, 200 and 300 mm/min. The grinding wheels were checked for hardness and density before the experiments and trued on both sides and carefully balanced.

The actual temperature fields were concentrated in a region having a depth of 0.1-0.2 mm and were inaccessible to direct measurement. The temperature field was therefore simulated to clarify the nature of temperature distribution and its relationship to grinding conditions. The model was a unit which could be used for moving a carbon electrode along the surface of a 12Kh2N4A steel specimen. An electric current was sent through the contact area between the electrode and the specimen and the heat released was checked by measuring the electrical power. An EPP-09 potentiometer and a chromel-copel thermocouple were used for recording the temperature field of the model.

Distribution of heat between the workpiece and the chip varies with the depth of cut. The amount of heat which goes to the chip may be disregarded for light cuts (t = 0.02 mm or less). This heat increases with cutting depth and at 0.1 mm is nearly 25% of the total heat for 12Kh2N4A steel. In spite of the insignificant difference in temperatures in the grinding zone between 0.02 and 0.1 mm, the structural transformations during grinding vary with cutting depth in this interval. Metallographic studies were confirmed by analysis.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

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ACC NR: AP6017714

Changes in microhardness revealed that structural transformations take place in the surface layer of carburized steels under the action of high temperatures during grinding. The temperature in the grinding zone must be lowered to reduce these structural transformations. This may be accomplished by reducing the severity of operating conditions (which is extremely undesirable since this also results in a sharp reduction in productivity) or by using sectional grinding wheels. Experiments on intermittent grinding at the Perm' Polytechnical Institute indicate that thermal processes may be controlled and the quality of the surface layer may be improved by varying the size of the cutting sections on sectional wheels. Orig. art. has: 8 figures, 4 formulas and 1 table. [JPRS]

SUB CODE: 13, 20, 11 / SUBM DATE: none / ORIG REF: 005

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APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

KHAZOV, A.P., inzhener; POTEKHIN, V.N., inzhener.

Quarries for road building organizations. Avt.dor.19 no.5:(p 3 of cover) My '56. (MLRA 9:8)
(Quarries and quarrying)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, V. V.

PA 64T97

USSR/Physics
Wave Guides
Filters

Apr 1948

"Experimental Research on the Wave Guide Properties of a Multisection Filter," V. V. Potemkin, Sci Res Inst of Phys, Moscow State U, 7½ pp

"Zhur Tekh Fiz" Vol XVIII, No 4

Presents basic features of the theory, experimental equipment, the phenomenon of short-circuiting and dispersion of normal waves, three-dimensional pulses, and asymmetrical filters. Author is grateful to Prof P. Ye. Krasnushkin for his aid. Submitted 21 Aug 1947.

64T97

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMIN, V. V.

"Experimental Investigation of the Wave-Guide Properties of Multipolar Filters." Thesis for degree of Cand. Physicomathematical Sci. Sub 22 Jun 49, Moscow Order of Lenin State U imeni M. V. Lomonosov.

Summary 92, 18 Dec 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, V.V.; GERTSENSHTEYN, M.Ye.

G.V.Gordeev's strata theory. Zhur.eksp. i teor.fiz. 24 no.5:610-612 My '53. (MLRA 7:10)
(Nuclear physics)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, V.V.

LOW-FREQUENCY OSCILLATIONS IN THE POSITIVE COLUMN OF THE GLOW DISCHARGE. M. E. Gertsenshtein and V. V. Potemkin. Zhur. Eksptl'. i Teoret. Fiz. 24, No. 6, 643-51(1953). (In Russian).

It has been shown that longitudinal electric waves in the positive column of a discharge are always accompanied by pulsations in the current intensity. By assuming simultaneity of waves and pulsations it becomes possible to explain the spatial periodicity of discharge luminescence and the phenomenon of moving luminescent layers. The simultaneity is confirmed by the analysis of oscillograms of the probe voltage. The theory proposed stipulates, in agreement with experimental data, that the periodic luminescent structure must disappear at low gas pressures. An amplifier with feedback is an equivalent model of the discharge in relation to oscillations. The analysis of this model yields the existence of several generating regions as well as the dependence of frequency on the anode-cathode distance; this agrees quantitatively with experiment. Another theoretical result is that the wave energy flux is always directed from cathode to anode, irrespective of the phase velocity. (Science Abstracts)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

USSR/Physics - Wave guides

FD-1204

Card 1/1 Pub. 129-7/19

Author : Potemkin, V. V.

Title : Modeling of wave guides

Periodical : Vest. Mosk. un., Ser. fizikomat. yest. nauk, 9, No. 5, 65-80, Aug 1954

Abstract : Schematic diagram, construction and operation of a special modeling apparatus designed by the author using P. Ye. Krasnushkin's theoretical work (J. of Phys., No 5, (1944); Doctor's Dissertation. ibid. No 1, (1946); ZhTF 17, 6 (1947)) is described. The model is intended for the solution of wave equations with mixed boundary conditions including emitting conditions. The integrator was constructed in the oscillation laboratory of the Physics Faculty of the Moscow University under guidance of Prof. P. Ye. Krasnushkin. Fifteen references including 3 foreign. Tables, graphs.

Institution : Chair of Oscillations, Moscow University

Submitted : December 16, 1950

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

Potemkin, V. V.

Low-frequency oscillations in the positive column of a glow discharge. M. E. Gertsenshtein and V. V. Potemkin (Moscow State Univ.). *Zhur. Eksptl. i Teoret. Fiz.* 27, 643-54(1954).—It is assumed that the phase delay is caused by longitudinal electromagnetic waves propagated along the axis of the pos. column. The internal resistance of a discharge tube as a wave generator is of the order of several hundred ohms. An analysis of luminescent phenomena in the discharge shows that there is a connection between the waves and the current pulses; the periodic luminous structure disappears on lowering the pressure at a pressure p_{min}. An equiv. circuit is developed for the discharge tube acting as a pulse generator. The amplitude and the frequency of pulsation are changing periodically with the anode-cathode distance. S. Pakswer

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, V.V.

Fifty years of the Millerovo Oil Extraction Plant. Masl.-zhir. prom. 23 no.12:13-14 '57. (MIRA 11:2)
(Millerovo—Oil industries)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

KORABLEV, I.V.; POTEMKIN, V.V.

Sensitivity of a superheterodyne method for measuring amplitude fluctuations. Radiotekh. i elektron. 9 no.1:172-174 Ja '64. (MIRA 17:3)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta im. Lomonosova.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

9(9)

AUTHOR: Potemkin, V.V.

SOV/55-58-3-13/30

TITLE: Interaction of two Band Filters (Vzaimodeystviye dvukh polosovykh fil'trov)

PERIODICAL: Vestnik Moskovskogo universiteta, Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958, Nr 3, pp 93-96 (USSR)

ABSTRACT: The author investigates wave processes in two connected band filters. There exist two types of waves : a synphase- and an antiphase wave which can propagate in opposite directions. The function $\omega(\varphi)$ consists of two different branches for each of these waves. The oscillatory processes which correspond to that branch of the synphase wave for which $\omega \to 0$ for $\varphi \to 0$, are denoted as acoustic oscillations. The oscillations corresponding to the other branch are denoted as optical oscillations. The course of $f = \frac{1}{2\pi}\omega(\varphi)$ was theoretically and experimentally determined (good coincidence). Phase velocities of the synphase and antiphase waves were also experimentally measured. The spatial beating was observed in the "acoustic" and "optical" range.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

Interaction of two Band Filters SOV/55-58-3-13/30

There are 2 figures, 1 table, and 3 Soviet references.

ASSOCIATION: Kafedra teorii kolebaniy (Chair of Oscillation Theory)

SUBMITTED: July 4, 1957

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

ZHIGAL'SKIY, G.P.; POTEMKIN, V.V.

Noises in cyclic magnetic reversal of ferrites at low temperatures. Zhur. tekh. fiz. 33 no.10:1274-1280 O '63. (MIRA 16:11)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

VYAL'TSEV, A.O.; IVANOV, I.V.; KARASEV, M.D.; POTEMKIN, V.V.

Measurement of the noise of frequency multipliers using a transistor diode. Radiotekh.i elektron. 8 no.2:349-351 F '63. (MIRA 16:2)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta, kafedra teorii kolebaniy.
(Frequency multipliers--Noise)
(Radio measurements)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, V.V.; VASIL'YEV, Yu.V.

Memory effect on ferrates. Dokl. AN SSSR 140 no.4:1051-1053 O '61. (MIRA 15:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. Predstavleno akademikom I.K.Kikoinym.
(Magnetic induction)
(Ferrates)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POTEMKIN, V.V.

Studying noises in magnetic materials. Vest. Mosk. un. Ser. 3: Fiz., astron. 15 no. 6:54-58 N-D '60. (MIRA 14:5)

1. Kafedra teorii kolebaniy Moskovskogo gosudarstvennogo universiteta.

(Magnetic materials—Noise)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

29112
S/020/61/140/005/009/0
B125/B138

9,7140 (1121, 1147)

AUTHORS: Potemkin, V. V., and Vasil'yev, Yu. V.

TITLE: Study of the "memory effect" in ferrites

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 140, no. 5, 1961, 1051-1053

TEXT: The authors studied this "memory effect" with comparatively high power control signals (10^{-9} - 10^{-5} watts). The effect was distinctly marked and could be measured by the method and apparatus proposed by M. G. Say (Magnetic Amplifiers and Saturable Reactors, 1954). The authors studied a ferrite of the type "оксифер 200" (oksifer 200) at two frequencies f_1 = 200 cps and f_2 = 2000 cps of the variable magnetic excitation fields. At 200 cps the field strengths were $5H_c$, $2H_c$, 0.5 H_c, and at 2000 cps, $5H_c$, $2H_c$, H_c, H_c being the coercive force of the ferrite amounting to 0.45 oersteds. The field strength of the controlling constant field lay between 0 and $2H_c$. Figs. 1 and 2 illustrate the most important results of the present paper. The time t, within which a

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S/020/61/140/005/009/022
B125/B138

Study of the "memory ...

"temporary memory" exists, is plotted on the abscissa. The time τ plotted on the left is the duration of action of the constant magnetic field (signal). The "temporary memory" depends on the duration of action of the constant field, the frequency, and the ratio between field strengths of the constant magnetic field and of the magnetic alternating field. The "memory effect" depends on three principal factors: hysteresis, viscosity phenomena and Foucault currents. If $\ddot{H} \ll H_c$ ($\ddot{H}$ is the field strength of the constant field) and if $\tilde{H}$ (field strength of the magnetic alternating field) is of the order of magnitude of the saturation field, then the individual cycle shifts into the Rayleigh range. After the switch-off of the constant field $\ddot{H}$, the individual cycle returns to the initial position. There is no "memory" due to the asymmetric form of the loop of the individual cycle since the latter becomes symmetric. The appearance of the even harmonic of induction (here called "memory") after the switch-off of $\ddot{H}$ is a consequence of the nonlinearity of the characteristic of the magnetic material, the asymmetry of the magnetic cycle. With large $\ddot{H}$, a "memory effect" exists since, in this case, the dynamic hysteresis loops shift into the range

Card 2/A3

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

20333
S/188/60/000/006/006/011
B101/B204

9.2530 (1068, 1147, 1158)

AUTHOR: Potemkin, V. V.

TITLE: Investigation of the noises of magnetic substances

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya 3, fizika, astronomiya, no. 6, 1960, 54-58

TEXT: Two factors may impair the sensitivity of magnetic amplifiers: 1) Instability of zero point due to hysteresis; 2) magnetic noises, caused by discontinuity in the magnetization process of the ferromagnetic. The present paper reports on the experimental investigation of noises due to material used in magnetic amplifiers being remagnetized once. A current was conveyed to the primary winding of a magnetic amplifier, which increased linearly with time. The noise emf was induced in the secondary winding, was amplified by means of an electronic amplifier, and conveyed to the spectrum analyzer. Amplification of the noise voltage was carried out by means of a four-step amplifier with low noise level, amplification band 200-160 kc/sec, amplification coefficient $2 \cdot 10^5$, sensitivity $5 \cdot 10^{-6}$ v.

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APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013427

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

Investigation of the noises...

A spectrum analyzer of the type AH-1 (AN-1) served as recorder, which permitted analysis of oscillations between 100-20 kc/sec with a band of 15 cps. Investigations were carried out of 1) Permalloy 50 (50N) as a 10 cm wide band, 0.15 mm thickness, 1200 mm length. The average length of a winding was 70 mm; 2) alloy 70 HM (70NM) as core from 18 rings, 7 mm wide, 0.2 mm thick, length of circumference 110 mm; number of primary windings of the first core 115, of the secondary windings 1100. In the second core 228 primary- and 1540 secondary windings. The slowly rising current induced an emf proportional to dB/dt in the secondary winding. Magnetization of the specimen, however, was not continuous. By means of the pulse-oscilloscope of the type OK-17 (OK-17), the fluctuation of the emf could be observed. The time, in which the field grew from 0 to H saturation, was varied between 5 - 90 sec. Fig. 2 shows the experimental result. The upper and the lower curves were recorded by a single magnetic reversal of permalloy 50N and of the alloy 70NM, respectively. The result obtained is theoretically discussed. The emf of secondary windings represents a random process V_t, which is the result of individual impulses $v(t - t_i)$, caused by magnetic reversal of individual

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Investigation of the noises...

domains. $v_t = \sum_{i=1}^{N} v(t - t_i) = (2B_S W/10^8 l) \sum_{i=1}^{N} \Delta \dot{V}_i$ (1), where v(t) is the pulse of the emf of a single domain, N the number of domains, W the number of coil windings, l the average length of the coil, B_S the saturation induction. For the shot noise, $G(\omega) = 2\bar{n}(2B_S W/10^8)^2 |S(\omega)|^2$ (2) is written down, and for its interrelation with the mean square of the fluctuation: $\overline{U^2} = \int_0^\infty G(\omega) d\omega = \bar{n} \int_0^\infty [v(t)]^2 dt$ (3). $G(\omega)$ is the energy spectrum of the noise, $\bar{n}$ is the number of domains whose polarity was once reversed per unit time;

$S(\omega) = \int_{-\infty}^{\infty} v(t) \exp(-i\omega t) dt$ (4) is the spectral density for the individual perturbation. Assuming an exponential form of the emf pulse $v(t) = (2B_S W S/10^8 \tau_o) \exp(-\beta t)$, $G(\omega) = 2A[1/(\beta^2 + \omega^2)]$ (5), where

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$A = (2B_S wS/10^8 \tau_o)^2 \bar{n}$ (6). The spectral density of the noises is inversely proportional to the square of frequency. The experimental data (Fig.2) agree herewith qualitatively. The volume of the non-magnetized domains is estimated. For the fluctuation of emf $U = (d\Phi/dt)\cdot(w/10^8)$ (7) is written down. If the induction current is uniformly distributed over the cross section of the specimen and if the change in induction equals

$2B_S \int_{t_1}^{t_2} U(t)dt = w2B_S \Delta V/10^8 l$ (8) holds. From (1) and (3) one obtains for $\dot{V}_i = V_o/\tau_o$ (V_o = volume of the domain, τ_o average time of magnetic reversal of the domain): $\overline{U^2} = \bar{n}V_o^2 C/\tau_o^2 = V_c^2 C/N_1 \tau^2$; $C = (2B_S w/10^8 l)^2$ (10) (τ = duration of noise during magnetic reversal of all domains, V_c = volume of the core). From $\overline{U^2}$ and τ_o ($5\cdot10^{-4}$ sec) $V_o = 0.6\cdot10^{-8}$ cm^3 was calculated for permalloy. A. A. Grachev and F. V. Bunkin are mentioned. There are 2 figures and 8 references: 4 Soviet-bloc and 4 non-Soviet-bloc.

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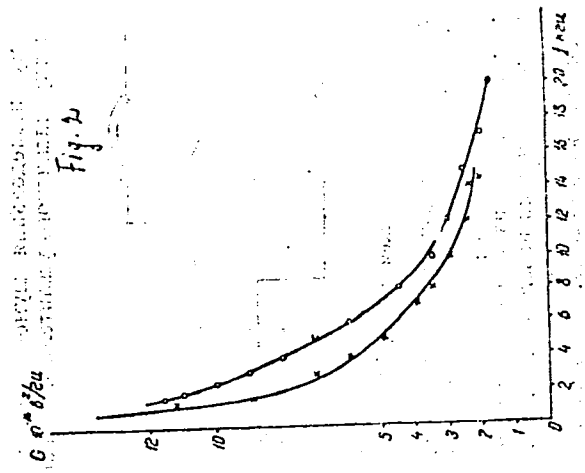
"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

Investigation of the noises...

ASSOCIATION: Moskovskiy gosudarstvennyy universitet, Kafedra teorii kolebaniy (Moscow State University, Department of Oscillation Theory)

SUBMITTED: April 21, 1960



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